

**10/526051**

**BT01 Rec'd PCT/PTC 28 FEB 2005**

By Express Mail # EV427337968US · February 28, 2005

**In the Specification:**

Page 1, line 3, delete the title "Description"

Page 1, before line 5, the paragraph beginning with "The invention is" insert the following titles and paragraph:

**-- PRIORITY CLAIM**

This is a U.S. national stage of application No. PCT/EP2003/011826, filed on 24 October 2003. Priority is claimed on the following application(s): Country: Germany, Application No.: 102 50 054.1, Filed: 25 October 2002.

**BACKGROUND OF THE INVENTION**

1. **Filed of the Invention --**

Please replace the paragraph beginning on page 1, line 5, with the following rewritten paragraph:

-- The invention is directed to a sliding wall with a plurality of laterally displaceable wall elements which are guided by means of running rollers at a carrying profile arranged above the wall elements. At least one of these wall elements is constructed with a drive unit for actuating the wall element as a rotating leaf, the drive unit being arranged so as to be stationary with respect to the displaceable wall element. Actuating means An actuating mechanism which can is automatically operate operable or be inactive by means of a rod linkage when the wall element is displaced are is provided between the drive unit and the rotating leaf. --

Page 1, before line 12, the paragraph beginning with "A sliding wall", insert the following title:

-- 2. Description of the Prior Art --

Please replace the paragraph beginning on page 1, line 12, with the following rewritten paragraph:

-- A sliding wall with a plurality of laterally displaceable wall elements that are displaceable by means of running rollers along a sliding rail is described in ~~DE 199 59 825 C1~~ U.S. Patent No. 6,662,502. At least one wall element is constructed as a rotating leaf that can be actuated by a door closer. A sliding rail rod linkage which automatically couples or uncouples is arranged between the door closer and the wall element that serves as a rotating leaf. The arrangement of the individual wall elements with respect to one another is realized by means of fittings. This means that when moving the sliding wall with all of its elements, these elements must always be moved in their entirety. This imparts a correspondingly high stability to the elements of the sliding wall with respect to one another. Further, there is a locking member by means of which the rotating leaf can only be actuated when the entire sliding installation is in the closed position. The rotating door drive unit which is mounted in a stationary manner is released in this position. Due to the design of the suspension of the rotating leaf, that is, due to the fact that the suspension is not arranged at the displaceable and rotatable wall element, the suspension is relieved because the weight of the drive device is structurally absorbed. --

Page 1, before line 26, the paragraph beginning with "It is the object", insert the following title:

-- **SUMMARY OF THE INVENTION** --

Please replace the paragraph beginning on page 1, line 26, with the following rewritten paragraph:

-- It is the object of the invention to further develop the prior art in such a way that a drive unit according to ~~DE 199 59 825 C1~~ U.S. Patent No. 6,662,502 can be used in any type of sliding wall. --

Please replace the paragraph beginning on page 1, line 28, with the following rewritten paragraph:

-- This object is met in that a sliding wall comprising individual wall elements which are movable manually or by motor has a bottom guide. More particularly, the sliding wall has a wall element formed as a rotating leaf which is guided, ~~particularly in a wall element formed as a rotating leaf~~, at the upper end and lower end of the leaf. Further, the rotating leaf has a first swivel pin and a second swivel pin in order to impart corresponding stability to the rotating leaf during a rotating movement. Further, the individual wall elements are automatically coupled with one another at the moment that they form a closed front, so that the rotating leaf can swivel without risk. --

Please replace the paragraph beginning on page 2, line 4, with the following rewritten paragraph:

-- The above-stated object is met by a sliding wall, comprising a plurality of displaceable wall elements, a carrying profile arranged above said wall elements, wherein the wall elements are individually displaceable along the carrying profile. Each of the wall elements have a running roller arranged and dimensioned for guiding the each of the wall elements along the carrying profile. A guide rail is connected to the ground or floor, each of the wall elements having a bottom guide engageable in the guide rail. At least one of the wall elements comprises a rotating leaf swivelable about at least one first swivel pin and at least one second swivel pin. A drive unit is stationarily arranged relative to one of the carrying profile and he guide rail. An actuating mechanism is arranged and dimensioned for connecting the drive unit to the rotating leaf for actuating said rotating leaf in response to the drive unit when the rotating leaf is in a position along the carrying profile that is aligned with the drive unit, the actuating mechanism comprising a rod linkage. A connection device is arranged for automatically connecting a lower area of the at least one of the wall elements to an adjacent one of the wall elements when the at least one of the wall elements and the adjacent one of the wall elements are driven together, whereby the rotating leaf is safely swivelable relative to the at least one of the wall elements. according to patent claim 1 through the characteristic features indicated therein. The subclaims show advantageous further developments of the invention. --

Page 4, before line 26, the paragraph beginning with "The invention will", insert the following title:

-- **BRIEF DESCRIPTION OF THE DRAWINGS** --

Please delete the paragraph beginning on page 4, line 26, in its entirety.

Page 4, insert the following new paragraph after line 28.

-- In the drawings, wherein like reference characters denote similar elements throughout, the several views: --

Please replace the paragraph beginning on page 4, line 29, with the following rewritten paragraph:

-- Figure 1 ~~shows~~ is a schematic side view of a sliding wall system with a rotating leaf according to the present invention;

Figure 2 ~~shows~~ is a top view of a possible construction of a sliding wall with two automatic rotating leafs;

Figure 3 ~~shows~~ is a partial section through an upper carrying profile and a lower guide rail and a side view of a drive unit with a rotating leaf;

Figure 4 ~~shows~~ is a partial section of two adjacent wall elements prior to coupling;

Figure 5 ~~shows~~ is a view similar to Figure 4, but in the coupled state;

Figure 6 ~~shows~~ is a view similar to Figure 5, but with a swiveled rotating leaf with locking of the two adjacent leaves;

Figure 7 is a top view showing a partial section in a partly swiveled rotating leaf;

Figure 8 is a side view showing a coupling pin in connection with a lever arm;

Figure 9 is a perspective view of a coordinating element;

Figure 10 is a perspective view of a lever. --

Page 5, before line 13, the paragraph beginning with "A sliding wall", insert the following title:

-- **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS** --

Please replace the paragraph beginning on page 5, line 13, with the following rewritten paragraph:

-- A sliding wall shown in Figure 1 comprises a plurality of wall elements. In the embodiment example, the plurality of wall elements comprises two displaceable wall elements 1 and a displaceable and swivelable wall element 2. The wall elements 1 are arranged adjacent to wall element 2. The wall elements 1 are arranged so as to be displaceable inside a carrying profile 8 by means of connections 4 by a fastening profile element 3 and a running carriage 18 (see Fig. 3). The wall element 2 is similarly connected, but a suspension profile 44 is used in the upper area instead of the fastening profile 3. The connection to the carrying profile 8 is realized in the same manner as that of the displaceable wall elements 1. --

Please replace the paragraph beginning on page 5, line 27, with the following rewritten paragraph:

-- A leaf profile 11 is located at the wall element 2 below the suspension profile 44. At the suspension profile 44 located above it, a An upper lever arm 12 is supported at one end at the leaf profile 11 by a swivel pin 14 at the other end by another pivot bearing 10. The suspension profile 44 is located above the lever arm 12. --

Please replace the paragraph beginning on page 6, line 1, with the following rewritten paragraph:

-- The bottom guide 57 functions at the same time as a first swivel pin which is arranged approximately in the center of the wall element 2. A swivel pin 19 that is axially aligned with the first swivel pin is located at the upper end of the leaf profile 11, such that leaf profile 11 swivels with the swivable wall element 2 relative to the suspension profile 44. --

Please replace the paragraph beginning on page 6, line 4, with the following rewritten paragraph:

-- In a development of the invention, a second swiveling pin is provided for the upper and lower lever arms 12, 13 (described in more detail below) with their swivel pins 14, 15, in addition to the first swivel pin 19, 57. The swivel pins 14, 15 are likewise aligned one above the other. --

Please replace the paragraph beginning on page 6, line 7, with the following rewritten paragraph:

-- The embodiment example of a sliding wall in Figure 2 shows, in the left-hand area, a wall 16 from which a carrying profile 8 extends in any shape. The carrying profile 8 terminates opposite from the wall in a station in which the individual wall elements 1, 2 can be parked, that is, when the sliding wall is opened. The sliding wall is closed in the drawing, so the individual wall elements 1 and 2 remain in their use position. In the area where the wall elements 2 are arranged, there is a drive unit 55 at the top, namely, in the area of the carrying

By Express Mail # EV427337968US · February 28, 2005

profile 8. The drive units 55 are stationary and are not moved with the sliding wall. The schematic views in Figure 2 show various positions of the wall elements 2 during the opening process of the wall elements 2. --

Please replace the paragraph beginning on page 6, line 15, with the following rewritten paragraph:

-- It can be seen from Figure 3 how a the drive unit 55 ~~such as that mentioned above~~ cooperates with the wall element 2 serving as rotating leaf. The drive unit 55 which is shown in this side view in partial section is connected in a stationary manner with the carrying profile 8 and the running carriage 18 contained therein by mean of the connection 4 to the suspension profile 44. The leaf profile 11 to which the glass element of the wall element 2 is fastened is located below the suspension profile 44. To enable rotation of the wall element 2, the swivel pin 19 is connected to a running carriage, not shown, by a pendulum suspension within a sliding rail which is located in the suspension profile 44. --

Please replace the paragraph beginning on page 7, line 5, with the following rewritten paragraph:

-- As can be seen from Figure 1, actuation arms for the displaceable and swivelable wall element 2 ~~comprises an~~ comprise the upper actuation lever arm 12 and a the lower actuation lever arm 13 ~~which are constructed as levers~~. The upper lever arm 12 is rotatably mounted by means of the swivel pin 14 which is articulated at the leaf profile 11. Further, the upper lever arm 12 is mounted at the pivot bearing 10 at its other end. This forms an

By Express Mail # EV427337968US · February 28, 2005

axis of rotation in the suspension profile around which the lever arm can rotate. For the most compact possible construction, the upper lever arm 12 is arranged inside a free cut, not shown in more detail, in the suspension profile 44. --

Please replace the paragraph beginning on page 7, line 12, with the following rewritten paragraph:

-- The Each of the upper end and the lower end of the wall element 2 accordingly comprises comprise three swivel pins, namely, the swivel pin in the area of the pivot bearing 10 at the side of the suspension profile 44 around which the actuation arm 12 swivels, and the actual swivel pins of the wall element 2, namely, the first swivel pin 19, 57 and the second swivel pin 14, 15. --

Please replace the paragraph beginning on page 7, line 21, with the following rewritten paragraph:

-- Figures 4 to 7 show how the adjacent wall elements 1 and 2 are connected to one another. The displaceable wall element 1 with the coupling element 20 is shown on the right-hand side of Figure 4. The coupling element 20 projects out of the displaceable wall element 1. The coupling element 20 is constructed as a flat structural component part. Inside the wall element 1, the coupling element 20 is fastened in a frictional and positive engagement in a recess 21 (see Fig. 6). In the area of the free end of the coupling element 20, the coupling pin 26 is connected in a frictional and positive engagement with the coupling element 20 by means of a

weld 39 (see Fig. 8). The coupling pin 26 projects out of the coupling element 20 by its coupling projection 42 on one side and by its locking end 37 on the other side. --

Please replace the paragraph beginning on page 7, line 30, with the following rewritten paragraph:

-- The swivelable wall element 2 is shown on the left-hand side of Figure 4. The lever arm 13 is arranged so as to be swivelable inside a cutout in the lower closing profile 5, not shown in more detail. A connection element 25 which is supported on one side is located inside the lever arm 13. The connection element 25 can preferably be produced from a spring steel. The coupling element 20 penetrates into the lever arm 13 as it approaches the swivelable rotating leaf 2 and, therefore, the lever arm 13, as is shown in Figure 5. When the coupling pin 26 fits correctly inside a coordinating element 28 arranged above the lever arm 13 in the end area of an underside of the wall element 2 at the underside, an uncoupling cutout 32 ~~results~~ allows an opening movement of wall element 2. Figure 5 shows that the coupling projection 42 cooperates with a bore hole 27 inside the connection element 25. Accordingly, the coupling projection 42 would penetrate into the bore hole 27 if the connection element 25 were lowered. This would mean that the adjacent wall elements 1 and 2 would be connected to one another and, at the same time, a swivel pin would be formed in alignment with the pivot bearing 10 in the upper area of the wall element 2. --

Please replace the paragraph beginning on page 8, line 12, with the following rewritten paragraph:

-- The coordinating element 28 is shown in a perspective view in Figure 9. In the embodiment example, the coordinating element 28 has locking bevels 29 at one end which are directed away from one another and slope down toward the edge of the coordinating element 28. An unlocking surface 30 is located in the area where the locking bevels 29 would meet. The unlocking surface 30 cooperates with an adjusting screw 24 which is screwed into the connection element 25. The free end of the adjusting screw 24 projects beyond the lever arm 13 and contacts the unlocking surface 30 when the wall elements 1, 2 are aligned. This position is also shown in Figures 4 and 5. If the wall element 2 were swiveled slightly, the end of the adjusting screw 24 would slide down one of the two locking bevels 29, depending on the swiveling direction of the wall element 2, which would cause a swiveling of the connection element 25 and lever arm 13 at the same time as shown in Fig. 2 and in Fig. 6. The swiveling is introduced as soon as the drive unit 55 causes the opening process of the wall element 2 after a corresponding coupling of wall element 1 to wall element 2. The coordinating element 28 is fastened to the lower closing profile 5 by screws 33 through bore holes 34 which ensure a proper fit of the coordinating element 28 with the lower closing profile 5. --

Please replace the paragraph beginning on page 8, line 26, with the following rewritten paragraph:

-- At its other end, As further shown in Fig. 9, the other end of the coordinating element 28 has a coupling opening 31 through which the locking end 37 of the coupling pin 26

passes. In order to facilitate insertion, the coupling opening 31 has run-in bevels 35 which narrow conically, i.e., taper, toward the center of the coordinating element 28. At a certain point, the run-in bevels 35 continue into run-out bevels 36 which extend conically away from one another. The run-out bevels 36 end in the uncoupling cutout 32. --

Please replace the paragraph beginning on page 9, line 1, with the following rewritten paragraph:

-- The cooperation of the coordinating element 28 and the connection element 25 with the coupling element 20 and the coupling pin 26 results in a device for coupling the adjacent wall elements 1, 2 while simultaneously forming a locking member which secures the wall element 2 in the occupied position after swiveling the wall element 2 only slightly. --

Please replace the paragraph beginning on page 9, line 5, with the following rewritten paragraph:

-- Figure 7 shows a rotation and simultaneous swiveling ~~by means of the in~~ swiveling ~~devices directions~~ 46, 47 of the wall element 2 relative to the wall element 1. It can be seen that a tip, not shown in more detail, of the adjusting screw 14 ~~24~~ projects out of the lever arm 13 through an elongated hole in the form of an opening 45. Further, the lower lever arm 13 has a conical inlet 48 at its free end in the area of the connection element 25 in order to facilitate entry of the coupling pin 26. --

Please replace the paragraph beginning on page 9, line 10, with the following rewritten paragraph:

-- Figure 8 shows the arrangement and construction of the coupling pin 26. The locking end 37 is inserted into the coupling element 20 and is connected to it in a frictional and positive engagement by means of a weld 39. There is a projection 38 above the coupling element 20. Connected to the projection 38 is a frustum 40 with adjoining surface 41 and another frustum 40. The latter passes into the coupling projection 42. The frustums 40 serve to facilitate entry into the lower lever arm 13 and also into the coordinating element 28. --

Please replace the paragraph beginning on page 9, line 16, with the following rewritten paragraph:

-- The lower lever arm 13 is shown separately in a perspective view in Figure 10. The lower lever arm 13 has the connection element 25 in its left-hand end area and an additional possibility for locking the lever arm 13 in its right-hand end area, so that this lever 13 does not exit its use position when the wall element 2 is displaced along the carrying profile 8. The locking device comprises an end piece 50 51 having in its outer area a half-circular shape 50 which contains a notch 52 in its central area. A locking pin 54 (Figure 7) cooperates with the notch 52 and is contained in a threaded bore hole 53 of an angle 49. The angle 49 is fastened to the lower closing profile 5 in a frictional and positive engagement. --

Please replace the heading on page 12, with the following amended heading:

-- Claims What is claimed is --

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Please add the attached new Abstract as shown on a separate page thereto.